## **ABSTRACT**

Shape information indicative of shape of the optical recording medium in a direction perpendicular to a plane of an optical recording medium is obtained. The shape information is obtained before data is read from or written on the optical recording medium. A plurality of distance limits are set corresponding to each of a plurality of positions on the optical recording medium based on the shape information. A control is provided such that a relative distance between the objective lens and the optical recording medium at a position does not fall below a distance limit for that position.